

STATEMENT OF BASIS (AI No. 147681)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0123200 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Patton Sausage Company, Inc
11518 Highway 21 South
Bogalusa, LA 70427

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Molly McKean

DATE PREPARED: October 2, 2007

1. PERMIT STATUS**A. Reason For Permit Action:**

First time issuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

B. NPDES permit - NPDES permit effective date: N/A
NPDES permit expiration date: N/A

C. LPDES permits -
LPDES permit effective date: N/A
LPDES permit expiration date: N/A

D. Date Application Received: September 26, 2007

2. FACILITY INFORMATION**A. FACILITY TYPE/ACTIVITY - sausage processing and packaging plant**

Patton Sausage Company, Inc operates a beef sausage processing and packaging plant. The facility receives fresh meat and does not cure or maintain a smokehouse. There are no nitrate preservatives used in the process. The facility uses a limited amount of disinfectants and no caustic cleaners. Plant washdown water is generated daily from cleaning of equipment and floors in accordance with the sanitary code. Wastewater is screened to remove large meat particles and routed through a grease trap to a 3000 GPD mechanical treatment plant with equalization, aeration, and clarification which discharges through pipe to the road side ditch (001). Sanitary wastewater is treated with a conventional package treatment plant, combines with the washwater, and is discharged through Outfall 001.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: II, BPJ points to 5 based on facility size.
3. Wastewater Type: II
4. SIC code: 2013

Statement of Basis for
Patton Sausage Company, Inc,
LA0123200, AI No. 147681

Page 2

C. LOCATION - 11518 Highway21, Bogalusa, Washington Parish
Latitude 30° 41' 40", Longitude 89° 52' 26"

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: sausage processing wastewater (floor and equipment washwater), and sanitary wastewater
Treatment: process water - screening, grease trap, 3000 GPD mechanical treatment plant
Sanitary wastewater - 1500 GPD mechanical treatment plant with chlorination
Location: at the point of discharge from the pipe located on the north side of the facility, prior to mixing with any other waters
Flow: 4500 GPD
Discharge Route: Mill Creek via local drainage

4. RECEIVING WATERS

STREAM - Mill Creek via local drainage

BASIN AND SEGMENT - Pearl River Basin, Segment 090105

DESIGNATED USES -
a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife

5. TMDL STATUS

Subsegment 090105, Pearl River Navigation Canal from Pools Bluff to Lock No. 3, is listed on LDEQ's Final 2004 303(d) List as impaired for mercury and dissolved oxygen (EPA-Category 5). To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Pearl River Basin, those suspected causes for impairment which are not directly attributed to the sausage and luncheon meat processing point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated. BOD₅ limitations in the permit will address the potential to contribute to the dissolved oxygen impairment.

6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

7. COMPLIANCE HISTORY/COMMENTS

A. WQMD - There are no inspections on file as of October 5, 2007.

Statement of Basis for
Patton Sausage Company, Inc.,
LA0123200, AI No. 147681
Page 3

B. DMR Review/Excursions –

There are no DMRs on file as of October 5, 2007. This is an initial permit.

8. EXISTING EFFLUENT LIMITS

N/A This is an initial permit.

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 090105 of the Pearl River Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the ringed map turtle and the gulf sturgeon, which is listed as an endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the ringed map turtle. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

10. HISTORIC SITES

LDEQ has not received any comments from SHPO. Therefore, in accordance with the "Memorandum of Understanding (MOU) for the Protection of Historic Properties in Louisiana Regarding LPDES Permits," if no comments are received by LDEQ within the 30-day comment period, the LDEQ may consider that the SHPO has waived the right to provide comments, and the LDEQ may proceed with the permitting action.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Statement of Basis for
 Patton Sausage Company, Inc.
 LA0123200, AI No. 147681
 Page 4

Rationale for Patton Sausage Company, Inc

1. **Outfall 001** - sausage processing wastewater and sanitary wastewater (estimated flow is 4500 GPD)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (lb/day)	<u>Reference</u>
Flow	Report : Report	LAG530000
BOD ₅	5.4 : 10.6	40 CFR 432.75(a), LAG530000
TSS	6.5 : 12.8	40 CFR 432.75(a), LAG530000
Oil & Grease	1.9 : 3.8	40 CFR 432.75(a), LAG530000
Fecal Coliform (colonies/100 ml)	--- : 400	40 CFR 432.75(a), LAG530000
pH	6.0 su – 9.0 su (min) (max)	40 CFR 432.75(a), LAG530000

Treatment: process wastewater = screening, grease trap, 3000 GPD mechanical treatment plant
 sanitary wastewater = 1500 GPD mechanical treatment plant with chlorination

Monitoring Frequency: monthly

Limits Justification: Limits are based on 40 CFR 432 Subpart G – Meat and Poultry Processors, Sausage and Luncheon Meats Processors New Source Performance Standards and on sanitary wastewater limits established in the Class I Sanitary General Permit (LAG530000). Limits were calculated as a summation of process wastewater limits and sanitary wastewater limits (shown below) using 18,000 lb/day production and 1500 GPD sanitary flow. A fecal Coliform limit has been included in the permit, based on the Guideline and the Class I Sanitary General Permit.

Calculated Mass Loading Limits for Process Water

The following mass limits are calculated from the Effluent Limitation Guidelines (ELGs) for the Meat and Poultry Products Point Source (MPPPS) Category, per 40 CFR 432.75(a).

Monthly Average Limits

$$\text{BOD}_5 = (18,000 \text{ lbs/day}) \times (0.28 \text{ lbs/1000 lbs finished product}) = 5.04 \text{ lbs/day}$$

$$\text{TSS} = (18,000 \text{ lbs/day}) \times (0.34 \text{ lbs/1000 lbs finished product}) = 6.12 \text{ lbs/day}$$

$$\text{Oil and Grease} = (18,000 \text{ lbs/day}) \times (0.10 \text{ lbs/1000 lbs finished product}) = 1.8 \text{ lbs/day}$$

Daily Maximum Limits

$$\text{BOD}_5 = (18,000 \text{ lbs/day}) \times (0.56 \text{ lbs/1000 lbs finished product}) = 10.08 \text{ lbs/day}$$

$$\text{TSS} = (18,000 \text{ lbs/day}) \times (0.68 \text{ lbs/1000 lbs finished product}) = 12.24 \text{ lbs/day}$$

$$\text{Oil and Grease} = (18,000 \text{ lbs/day}) \times (0.20 \text{ lbs/1000 lbs LWK}) = 3.6 \text{ lbs/day}$$

Sanitary Wastewater Limits per LAG530000

Sanitary limits from LAG53000 have been applied to this discharge through BPJ. The limits have been converted from mg/l to lb/day as shown below.

Statement of Basis for
 Patton Sausage Company, Inc.
 LA0123200, AI No. 147681
 Page 5

BOD₅

Monthly Average = $(30 \text{ mg/l})(0.0015 \text{ MGD})(8.34) = 0.38 \text{ lb/day}$

Daily Maximum = $(45 \text{ mg/l})(0.0015 \text{ MGD})(8.34) = 0.56 \text{ lb/day}$

TSS

Monthly Average = $(30 \text{ mg/l})(0.0015 \text{ MGD})(8.34) = 0.38 \text{ lb/day}$

Daily Maximum = $(45 \text{ mg/l})(0.0015 \text{ MGD})(8.34) = 0.56 \text{ lb/day}$

Oil & Grease

Monthly Average = $(15 \text{ mg/l} / 1.5) ** (0.0015 \text{ MGD})(8.34) = 0.13 \text{ lb/day}$

Daily Maximum = $(15 \text{ mg/l})(0.0015 \text{ MGD})(8.34) = 0.19 \text{ lb/day}$

** Monthly Average concentration limit for Oil & Grease is not included in LAG53000. A monthly average limit has been calculated as shown and has been applied through BPJ.

Summation of BOD₅, TSS, and Oil & Grease Mass Limits for Outfall 001

Since this outfall discharges commingled sanitary and process wastewater, the loadings for each wastewater type have been summed. The sanitary wastewater and process wastewater are commingled prior to discharge. This is consistent with permitting practices for Meat and Poultry Processor Point Sources.

BOD₅

Monthly Average = $5.04 + 0.38 = 5.4 \text{ lb/day}$

Daily Maximum = $10.08 + 0.56 = 10.6 \text{ lb/day}$

TSS

Monthly Average = $6.12 + 0.38 = 6.5 \text{ lb/day}$

Daily Maximum = $12.24 + 0.56 = 12.8 \text{ lb/day}$

Oil & Grease

Monthly Average = $1.8 + 0.13 = 1.9 \text{ lb/day}$

Daily Maximum = $3.6 + 0.19 = 3.8 \text{ lb/day}$

BPJ Best Professional Judgement
 su Standard Units

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 2013 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in the storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).